

**ABSTRACT**

The invention starts with a motor vehicle with an internal combustion engine (12) and an auxiliary power supply device, which includes a fuel cell (50), wherein energy  
5 flows and/or media flows of the internal combustion engine (12) and the fuel cell (50) are coupled with one another, in which a cooling and heating circuit (10) is provided. It is proposed that the cooling and heating circuit (10) features a first partial circuit (26) and a second partial circuit (44), of which the first (26) is allocated to the internal combustion engine (12) and the second (44) to the fuel cell (50), and that the two partial circuits (26,  
10 44) are connected with one another via a supply line (62) having a supply valve (66) and via return line (64) having a return valve (68).